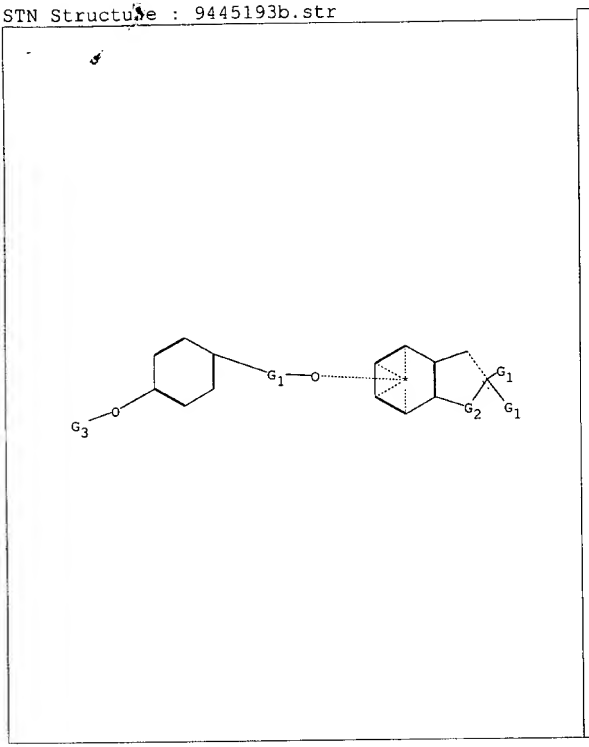
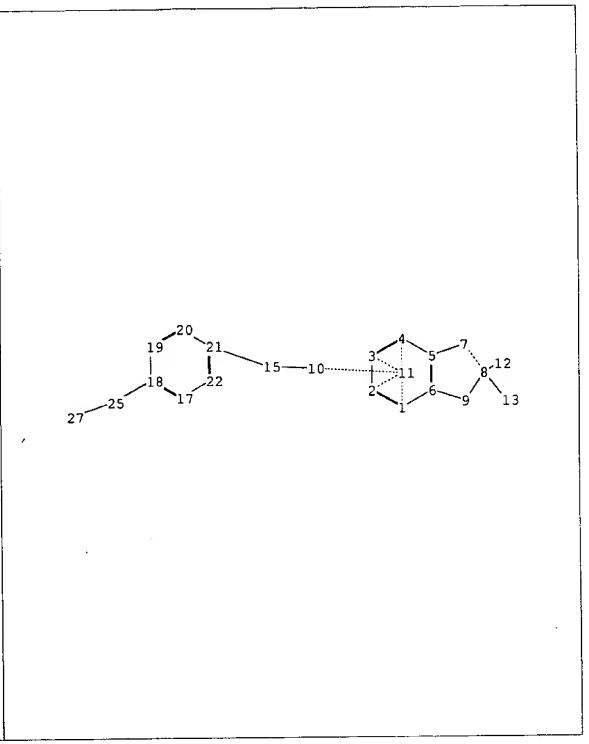
STN Structure : 9445193b.str





chain nodes :
10 12 13 15 25 27
ring nodes :
1 2 3 4 5 6 7 8 9 17 18 19 20 21 22
chain bonds :
8-12 8-13 10-15 15-21 18-25 25-27
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 17-18 17-22 18-19 19-20 20-21
21-22
exact/norm bonds :
5-7 6-9 7-8 8-9 8-12 8-13 10-15 15-21 18-25 25-27
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 17-18 17-22 18-19 19-20 20-21 21-22
isolated ring systems :
containing 1 : 17 :

G1:CH2,Et

G2:O,S

G3:CH3,Et

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 15:CLASS 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom
22:Atom 25:CLASS 27:CLASS

```
=> d his

     (FILE 'HOME' ENTERED AT 11:36:19 ON 20 OCT 2000)

     FILE 'REGISTRY' ENTERED AT 11:36:56 ON 20 OCT 2000
L1                STRUCTURE UPLOADED
L2              0 S L1
L3                STRUCTURE UPLOADED
L4                STRUCTURE UPLOADED
L5             11 S L4
L6                STRUCTURE UPLOADED
L7              0 S L6
L8              6 S L7 FULL

     FILE 'CA' ENTERED AT 11:43:42 ON 20 OCT 2000
L9              1 S L8

     FILE 'REGISTRY' ENTERED AT 11:45:03 ON 20 OCT 2000
L10               STRUCTURE UPLOADED
L11             0 S L10
L12               STRUCTURE UPLOADED
L13             1 S L12
L14             9 S L13 FULL

     FILE 'CA' ENTERED AT 11:47:19 ON 20 OCT 2000
L15             1 S L14
L16            15 S L5 FULL

     FILE 'REGISTRY' ENTERED AT 11:48:29 ON 20 OCT 2000
L17           190 S L5 FULL

     FILE 'CA' ENTERED AT 11:48:40 ON 20 OCT 2000
L18            36 S L17
L19             1 S L18 AND OHKAWA, S?/AU
L20            24 S L18 AND PD < JULY 1997

     FILE 'CAOLD' ENTERED AT 11:51:13 ON 20 OCT 2000
L21             0 S L17
```

```
Connecting via Winsock to STN

Trying 3106016892...Open

Welcome to STN International!  Enter x:x
LOGINID:ssspta1612BXR
PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1           Web Page URLs for STN Seminar Schedule - N. America
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                   DIOGENES
 NEWS  3  Aug 21   CAS patent coverage expanded
 NEWS  4  Aug 24   TABULATE Now Available in More STN Databases
 NEWS  5  Aug 28   MEDLINE from 1958 to Date - Only on STN
 NEWS  6  Sep  7   DGENE GETSIM ALERT: Similarity Current-Awareness
                   Searching of Biosequences
 NEWS  7  Sep 11   Textile Technology Digest (TEXTILETECH) now available
                   on STN
 NEWS  8  Sep 21   KKF renamed DKILIT
 NEWS  9  Sep 29   The Philippines Inventory of Chemicals and Chemical
                   Substances (PICCS) has been added to CHEMLIST

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  * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 11:36:19 ON 20 OCT 2000

=>
Uploading
THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE
Do you want to switch to the Registry File?
Choice (Y/n):
Switching to the Registry File...
Some commands only work in certain files.  For example, the EXPAND
command can only be used to look at the index in a file which has an
```

index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.15	0.15

FILE 'REGISTRY' ENTERED AT 11:36:56 ON 20 OCT 2000
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STRUCTURE FILE UPDATES: 18 OCT 2000 HIGHEST RN 297131-67-0
DICTIONARY FILE UPDATES: 18 OCT 2000 HIGHEST RN 297131-67-0

TSCA INFORMATION NOW CURRENT THROUGH July 8, 2000

Please note that search-term pricing does apply when conducting SmartSELECT searches.

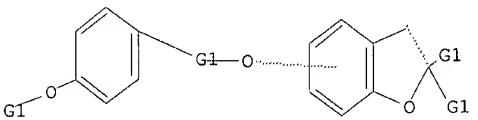
Structure search limits have been increased. See HELP SLIMIT for details.

=>
Uploading 09445193.str

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS
L1 STR



G1 CH2,Et

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 11:37:27 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 732 TO ITERATE

100.0% PROCESSED 732 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.02

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**
PROJECTED ITERATIONS: 13018 TO 16262
PROJECTED ANSWERS: 0 TO 0

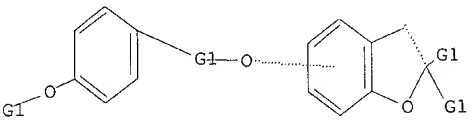
L2 0 SEA SSS SAM L1

=>
Uploading 09445193.str

L3 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS
L1 STR



G1 CH2,Et

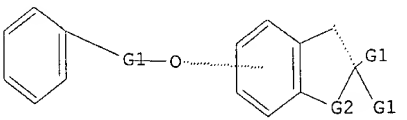
Structure attributes must be viewed using STN Express query preparation.

=>
Uploading 9445193a.str

L4 STRUCTURE UPLOADED

=> d l4

L4 HAS NO ANSWERS
L4 STR



G1 CH2,Et
G2 O,S

Structure attributes must be viewed using STN Express query preparation.

=> s l4

SAMPLE SEARCH INITIATED 11:40:37 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 2684 TO ITERATE

37.3% PROCESSED 1000 ITERATIONS 11 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.02

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 50575 TO 56785
PROJECTED ANSWERS: 264 TO 916

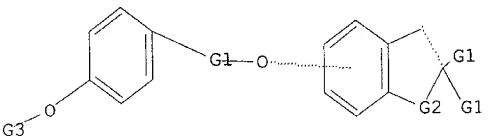
L5 11 SEA SSS SAM L4

=>
Uploading 9445193b.str

L6 STRUCTURE UPLOADED

=> d l6

L6 HAS NO ANSWERS
L6 STR



G1 CH2,Et

G2 O,S

G3 Me,Et

Structure attributes must be viewed using STN Express query preparation.

=> s l6

SAMPLE SEARCH INITIATED 11:43:28 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 900 TO ITERATE

100.0% PROCESSED 900 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 16201 TO 19799
PROJECTED ANSWERS: 0 TO 0

L7 0 SEA SSS SAM L6

=> s l7 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 126.00 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y

FULL SEARCH INITIATED 11:43:36 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 17889 TO ITERATE

100.0% PROCESSED 17889 ITERATIONS 6 ANSWERS
SEARCH TIME: 00.00.02

L8 6 SEA SSS FUL L6

=> file ca

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	129.30	129.45

FILE 'CA' ENTERED AT 11:43:42 ON 20 OCT 2000
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FILE COVERS 1967 - 13 Oct 2000 VOL 133 ISS 17
FILE LAST UPDATED: 13 Oct 2000 (20001013/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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Now you can extend your author, patent assignee, patent information, and title searches back to 1907. The records from 1907-1966 now have this searchable data in CAOLD. You now have electronic access to all of CA: 1907 to 1966 in CAOLD and 1967 to the present in CA on STN.

=> s l8

L9 1 L8

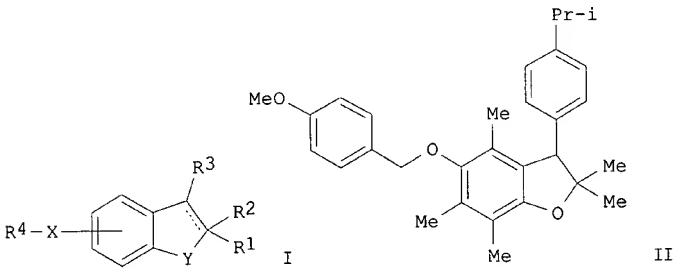
=> d l9, ibib abs fhitstr, 1

L9 ANSWER 1 OF 1 CA COPYRIGHT 2000 ACS
ACCESSION NUMBER: 130:38285 CA
TITLE: Benzofuran derivatives useful for suppressing neurodegeneration.
INVENTOR(S): Ohkawa, Shigenori; Setoh, Masaki; Kakihana, Mitsuru; Okura, Masahiro

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 132 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9855454	A2	19981210	WO 1998-JP2482	19980604
WO 9855454	A3	19990304		
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GW, HU, ID, IL, IS, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9875503	A1	19981221	AU 1998-75503	19980604
JP 11049765	A2	19990223	JP 1998-155709	19980604
EP 988289	A2	20000329	EP 1998-923128	19980604
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRIORITY APPLN. INFO.:			JP 1997-148325	19970605
			WO 1998-JP2482	19980604

OTHER SOURCE(S): MARPAT 130:38285
GI



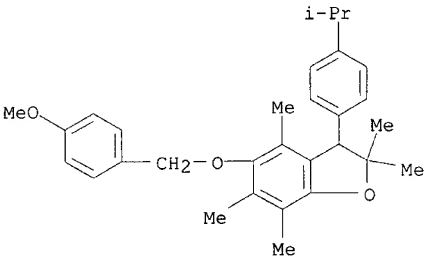
AB Title compds. I [R1, R2 = H, (un)substituted hydrocarbon group; or R1 and R2 form a 3- to 8-membered carbo- or heterocyclic ring which may be substituted; R3 = H, (un)substituted lower alkyl or arom. group; R4 = (un)substituted arom. or araliph. group, or acyl; X , Y = O or S which may be oxidized; benzene ring may be further substituted] and their salts are disclosed. The compds. suppress .beta.-amyloid toxicity, and are thus useful as agents for treating of preventing neurodegenerative diseases such as Alzheimer's disease or Parkinsonism. Prepns. of 33 compds. I and

their intermediates are described. For instance, etherification of 3-(4-isopropylphenyl)-2,2,4,6,7-pentamethyl-2,3-dihydrobenzofuran-5-ol with 4-methoxybenzyl chloride using NaH in DMF gave 49% title compd. II. Seven example compds. gave 27.3-47.0% in vitro protection of human neuroblastoma SK-N-SH cells from .beta.-amyloid neurotoxicity.

IT **216989-18-3P**, 3-(4-Isopropylphenyl)-5-[(4-methoxybenzyl)oxy]-2,2,4,6,7-pentamethyl-2,3-dihydrobenzofuran
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(product; prepn. of benzofuran derivs. as agents for suppressing neurodegeneration)

RN 216989-18-3 CA

CN Benzofuran, 2,3-dihydro-5-[(4-methoxyphenyl)methoxy]-2,2,4,6,7-pentamethyl-3-[4-(1-methylethyl)phenyl]- (9CI) (CA INDEX NAME)



=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	4.37	133.82

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.53	-0.53

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STRUCTURE FILE UPDATES: 18 OCT 2000 HIGHEST RN 297131-67-0
DICTIONARY FILE UPDATES: 18 OCT 2000 HIGHEST RN 297131-67-0

TSCA INFORMATION NOW CURRENT THROUGH July 8, 2000

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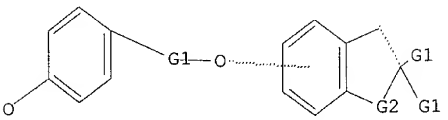
=>
Uploading 9445193c.str

L10 STRUCTURE UPLOADED

=> d l10

L10 HAS NO ANSWERS
L10 STR



G1 CH2,Et
G2 O,S

Structure attributes must be viewed using STN Express query preparation.

=> s l10

SAMPLE SEARCH INITIATED 11:45:34 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1053 TO ITERATE

95.0% PROCESSED 1000 ITERATIONS 0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 19114 TO 23006
PROJECTED ANSWERS: 0 TO 0

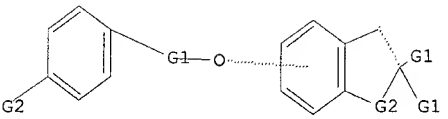
L11 0 SEA SSS SAM L10

=>
Uploading 9445193d.str

L12 STRUCTURE UPLOADED

=> d l12

L12 HAS NO ANSWERS
L12 STR



G1 CH2,Et

G2 O,S

Structure attributes must be viewed using STN Express query preparation.

=> s l12

SAMPLE SEARCH INITIATED 11:46:44 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1792 TO ITERATE

55.8% PROCESSED 1000 ITERATIONS 1 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 33302 TO 38378
PROJECTED ANSWERS: 1 TO 115

L13 1 SEA SSS SAM L12

=> s l13 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 126.00 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y

FULL SEARCH INITIATED 11:46:52 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 35588 TO ITERATE

100.0% PROCESSED 35588 ITERATIONS 9 ANSWERS
SEARCH TIME: 00.00.01

L14 9 SEA SSS FUL L12

=> file ca

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	127.20	261.02

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-0.53

FILE 'CA' ENTERED AT 11:47:19 ON 20 OCT 2000
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FILE COVERS 1967 - 13 Oct 2000 VOL 133 ISS 17
FILE LAST UPDATED: 13 Oct 2000 (20001013/ED)

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```
=> s l14

L15          1 L14

=> d his


     (FILE 'HOME' ENTERED AT 11:36:19 ON 20 OCT 2000)

     FILE 'REGISTRY' ENTERED AT 11:36:56 ON 20 OCT 2000
L1             STRUCTURE UPLOADED
L2           0 S L1
L3             STRUCTURE UPLOADED
L4             STRUCTURE UPLOADED
L5          11 S L4
L6             STRUCTURE UPLOADED
L7           0 S L6
L8           6 S L7 FULL

     FILE 'CA' ENTERED AT 11:43:42 ON 20 OCT 2000
L9           1 S L8

     FILE 'REGISTRY' ENTERED AT 11:45:03 ON 20 OCT 2000
L10            STRUCTURE UPLOADED
L11          0 S L10
L12            STRUCTURE UPLOADED
L13          1 S L12
L14          9 S L13 FULL

     FILE 'CA' ENTERED AT 11:47:19 ON 20 OCT 2000
L15          1 S L14
```

=> s l5 full

L16 15 L5

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.60	261.62

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-0.53

FILE 'REGISTRY' ENTERED AT 11:48:29 ON 20 OCT 2000
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DICTIONARY FILE UPDATES: 18 OCT 2000 HIGHEST RN 297131-67-0

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Structure search limits have been increased. See HELP SLIMIT for details.

=> s l5 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 126.00 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y

FULL SEARCH INITIATED 11:48:36 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 52797 TO ITERATE

100.0% PROCESSED 52797 ITERATIONS 190 ANSWERS
SEARCH TIME: 00.00.01

L17 190 SEA SSS FUL L4

=> file ca

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	126.30	387.92

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-0.53

FILE 'CA' ENTERED AT 11:48:40 ON 20 OCT 2000
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FILE COVERS 1967 - 13 Oct 2000 VOL 133 ISS 17
FILE LAST UPDATED: 13 Oct 2000 (20001013/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> s l17

L18 36 L17

=> s l18 and ohkawa, s?/au

232 OHKAWA, S?/AU
L19 1 L18 AND OHKAWA, S?/AU

=> d l19, ibib abs fhitstr, 1

L19 ANSWER 1 OF 1 CA COPYRIGHT 2000 ACS
ACCESSION NUMBER: 130:38285 CA
TITLE: Benzofuran derivatives useful for suppressing neurodegeneration.
INVENTOR(S): **Ohkawa, Shigenori**; Setoh, Masaki; Kakihana, Mitsuru; Okura, Masahiro
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 132 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

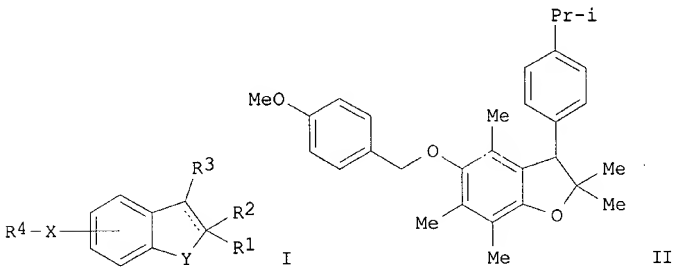
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9855454	A2	19981210	WO 1998-JP2482	19980604
WO 9855454	A3	19990304		

W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GW, HU, ID, IL, IS, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US,

UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

AU 9875503	A1	19981221	AU 1998-75503	19980604
JP 11049765	A2	19990223	JP 1998-155709	19980604
EP 988289	A2	20000329	EP 1998-923128	19980604
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRIORITY APPLN. INFO.:			JP 1997-148325	19970605
			WO 1998-JP2482	19980604

OTHER SOURCE(S): MARPAT 130:38285
GI



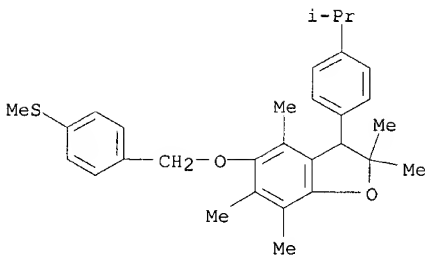
I II

AB Title compds. I [R1, R2 = H, (un)substituted hydrocarbon group; or R1 and R2 form a 3- to 8-membered carbo- or heterocyclic ring which may be substituted; R3 = H, (un)substituted lower alkyl or arom. group; R4 = (un)substituted arom. or araliph. group, or acyl; X , Y = O or S which may be oxidized; benzene ring may be further substituted] and their salts are disclosed. The compds. suppress .beta.-amyloid toxicity, and are thus useful as agents for treating of preventing neurodegenerative diseases such as Alzheimer's disease or Parkinsonism. Prepns. of 33 compds. I and their intermediates are described. For instance, etherification of 3-(4-isopropylphenyl)-2,2,4,6,7-pentamethyl-2,3-dihydrobenzofuran-5-ol with 4-methoxybenzyl chloride using NaH in DMF gave 49% title compd. II. Seven example compds. gave 27.3-47.0% in vitro protection of human neuroblastoma SK-N-SH cells from .beta.-amyloid neurotoxicity.

IT **216989-23-0P**, 3-(4-Isopropylphenyl)-2,2,4,6,7-pentamethyl-5-[[4-(methylthio)benzyl]oxy]-2,3-dihydrobenzofuran
RL: BAC (Biological activity or effector, except adverse); RCT (Reactant);
SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(product; prepn. of benzofuran derivs. as agents for suppressing neurodegeneration)

RN 216989-23-0 CA

CN Benzofuran, 2,3-dihydro-2,2,4,6,7-pentamethyl-3-[4-(1-methylethyl)phenyl]-5-[[4-(methylthio)phenyl]methoxy]- (9CI) (CA INDEX NAME)

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L4             STRUCTURE UPLOADED
L5          11 S L4
L6             STRUCTURE UPLOADED
L7           0 S L6
L8           6 S L7 FULL

     FILE 'CA' ENTERED AT 11:43:42 ON 20 OCT 2000
L9           1 S L8

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L10            STRUCTURE UPLOADED
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L13          1 S L12
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     FILE 'CA' ENTERED AT 11:47:19 ON 20 OCT 2000
L15          1 S L14
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L17        190 S L5 FULL

     FILE 'CA' ENTERED AT 11:48:40 ON 20 OCT 2000
L18         36 S L17
L19          1 S L18 AND OHKAWA, S?/AU

=> s l18 and pd < July 1997
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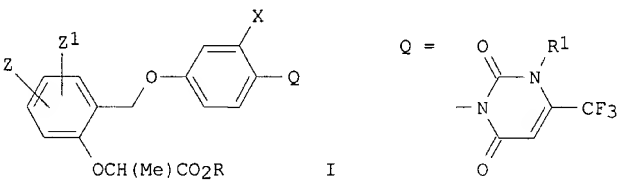
14123531 PD < JULY 1997
(PD<19970700)
L20 24 L18 AND PD < JULY 1997

=> d l20, ibib abs fhitstr, 1-24

L20 ANSWER 1 OF 24 CA COPYRIGHT 2000 ACS
ACCESSION NUMBER: 129:199315 CA
TITLE: Preparation of herbicidal 2-[(4-heterocyclylphenoxymethyl)phenoxy]alkanoates
INVENTOR(S): Theodoridis, George
PATENT ASSIGNEE(S): USA
SOURCE: U.S., 27 pp. Cont.-in-part of U.S. 5,674,810.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
US 5798316	A	19980825	US 1997-865306	19970529	
US 5262390	A	19931116	US 1992-935601	19920826	<--
US 5344812	A	19940906	US 1993-107560	19930817	<--
US 5674810	A	19971007	US 1995-523991	19950905	
PRIORITY APPLN. INFO.:			US 1992-935601	19920826	
			US 1993-107560	19930817	
			US 1995-523991	19950905	

OTHER SOURCE(S): MARPAT 129:199315
GI



I

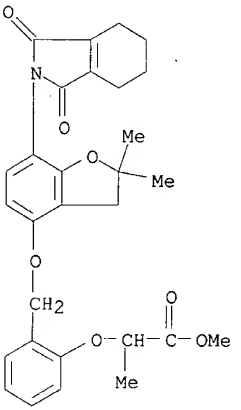
AB Herbicidal 2-[(4-heterocyclylphenoxymethyl)phenoxy]alkanoates, optionally in combination with other herbicides, are disclosed. The herbicidal 2-[(4-heterocyclylphenoxymethyl)phenoxy]alkanoates are I [R = H, (un)substituted lower alkyl, cycloalkyl, lower alkenyl or lower alkynyl, Na, K, NH4, etc.; R1 = lower alkyl, lower haloalkyl, lower cyanoalkyl, lower alkoxyalkyl, lower alkoxycarbonylalkyl, lower arylalkyl or amino; X = H, Me, F or Cl; Z = H, F, Cl, Br, lower alkyl or methoxy; Z1 = H, F or Cl; ZZ1 = (CH2)4; m = 0, 1, 2; n = 1-6]. I are both pre- and postemergent herbicides. The prepn. of I is given. I can be used with either grass-controlling or broadleaf herbicides.

IT **158755-65-8P**

RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. as herbicide)

RN 158755-65-8 CA

CN Propanoic acid, 2-[2-[[[7-(1,3,4,5,6,7-hexahydro-1,3-dioxo-2H-isoindol-2-yl)-2,3-dihydro-2,2-dimethyl-4-benzofuranyl]oxy]methyl]phenoxy]-, methyl ester (9CI) (CA INDEX NAME)



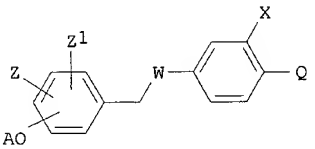
L20 ANSWER 2 OF 24 CA COPYRIGHT 2000 ACS
ACCESSION NUMBER: 126:221749 CA
TITLE: Preparation of herbicidal 2-[(4-heterocyclic-phenoxymethyl)phenoxy]alkanoates
INVENTOR(S): Theodoridis, George
PATENT ASSIGNEE(S): FMC Corp., USA
SOURCE: PCT Int. Appl., 90 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
WO 9708953	A1	19970313	WO 1996-US14193	19960905	<--
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN					
US 5674810	A	19971007	US 1995-523991	19950905	
AU 9670140	A1	19970327	AU 1996-70140	19960905	<--

PRIORITY APPLN. INFO.: US 1995-523991 19950905
WO 1996-US14193 19960905

OTHER SOURCE(S): MARPAT 126:221749

GI



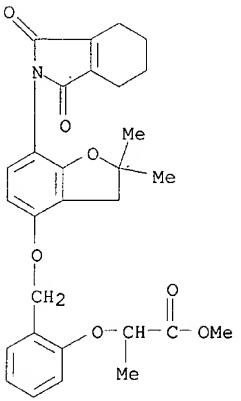
I

AB The title herbicidal compds. are I [A = alkanoate deriv. bonded to the phenoxy O at the .alpha.-C; Q = 4-difluoromethyl-4,5-dihydro-3-methyl-1,2,4-triazol-5(1H)-on-1-yl, 3,4,5,6-tetrahydrophthalimid-1-yl, 1-(1-methylethyl)imidazolidin-2,4-dion-3-yl, 1,4-dihydro-4-(3-fluoropropyl)-5H-tetrazol-5-on-1-yl, 3-chloro-4,5,6,7-tetrahydroindazol-2-yl, 4-methyl-1,2,4-triazine-3,5-dion-2-yl, 8-thia-1,6-diazabicyclo[4.3.0]nonane-7-on-9-ylimino or 1-methyl-6-trifluoromethyl-2,4-pyrimidinedione-3-yl; X = H, Me, F or Cl; W = O or S; Z = H, F, Cl, Br, lower alkyl, or methoxy; Z1 = H, F or Cl; AO may be in the 2-, 3-, or 4-position of the Ph ring].

IT **158755-65-8P**
RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. as herbicide)

RN 158755-65-8 CA

CN Propanoic acid, 2-[2-[[[7-(1,3,4,5,6,7-hexahydro-1,3-dioxo-2H-isoindol-2-yl)-2,3-dihydro-2,2-dimethyl-4-benzofuranyl]oxy]methyl]phenoxy]-, methyl ester (9CI) (CA INDEX NAME)



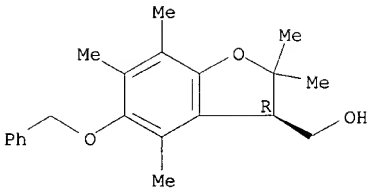
L20 ANSWER 3 OF 24 CA COPYRIGHT 2000 ACS
ACCESSION NUMBER: 126:211991 CA
TITLE: Enzymic resolution for an improved enantioselective synthesis of benzofuranyl derivatives: precursors to a class of vitamin E related antioxidants
AUTHOR(S): Ayers, Timothy A.; Schnettler, Richard A.; Marciniak, Gilbert; Stewart, Kenneth T.; Mishra, Rajesh K.; Krysan, Damian J.; Bernas, Bradley R.; Bhardwaj, Poonam; Fevig, Thomas L.
CORPORATE SOURCE: Hoechst Marion Roussel Research Institute, Cincinnati, OH, 45215, USA
SOURCE: Tetrahedron: Asymmetry (**1997**), 8(1), 45-55
CODEN: TASYE3; ISSN: 0957-4166
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Enzymic resoln. of 3-hydroxymethylbenzofurans using Candida rugosa lipase provides an enantioselective synthesis of vitamin E related antioxidants.

IT **183142-43-0P**
RL: BPN (Biosynthetic preparation); PUR (Purification or recovery); RCT (Reactant); BIOL (Biological study); PREP (Preparation)
(enzymic resoln. of (hydroxymethyl)benzofurans)

RN 183142-43-0 CA
CN 3-Benzofuranmethanol, 2,3-dihydro-2,2,4,6,7-pentamethyl-5-(phenylmethoxy)-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L20 ANSWER 4 OF 24 CA COPYRIGHT 2000 ACS
ACCESSION NUMBER: 126:186077 CA
TITLE: Preparation of novel thiazolidinediones having antidiabetic, hypolipidemic and antihypertensive properties
INVENTOR(S): Kallam, Anji Reddy; Lohray, Vidya Bhushan; Alla, Sekhar Reddy; Pingali, Harikishore; Ramanujam, Rajagopalan; Casturi, Seshagiri Rao
PATENT ASSIGNEE(S): Kallam, Anji Reddy, India; Lohray, Vidya Bhushan; Alla, Sekhar Reddy; Pingali, Harikishore; Ramanujam, Rajagopalan; Casturi, Seshagiri Rao
SOURCE: Can. Pat. Appl., 62 pp.
CODEN: CPXXEB
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 2173660	AA	19961011	CA 1996-2173660	19960409 <--
EP 801063	A1	19971015	EP 1996-105590	19960409
R: AT, BE, CH, DE, DK, FR, GB, IT, LI, LU, NL, SE				
PRIORITY APPLN. INFO.:			IN 1995-MA431	19950410

OTHER SOURCE(S): MARPAT 126:186077
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; A = (un)substituted unsatd. aliph., alicyclic, arom., heterocyclic groups; B = (un)substituted C1-10 divalent alkylene, alkenyl; D = (un)substituted divalent alkenyl, alkynyl, aralkyl, alkoxycarbonyl, aryloxycarbonyl groups; X = CH2, C(O), S, O, etc.; Ar = (un)substituted divalent arom., single or fused ring system, and ring may contain one or more hetero atoms such as N, S, O; R1, R2 = H, a bond, substituent; R1R2 = form a part of a ring; R = H, (un)substituted C1-10 alkenyl, aralkyl, etc.], useful for the treatment of type II diabetes, for prophylactic treatment of hyperlipidemia, hypertension, cardiovascular diseases including atherosclerosis as well as certain eating disorders, were prepd. Thus, reaction of aldehyde II with 2,4-thiazolidinedione in

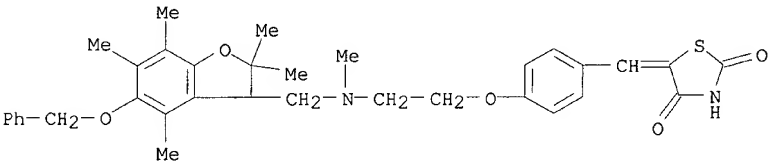
PhMe contg. piperidine and PhCOOH followed by treatment of the thiazolidine-2,4-dione III with concd. HCl in AcOH afforded IV which showed 43% redn. of RBS (random blood sugar) level in a 9 days treatment of male C57BL/KsJ-db/db mice.

IT **187340-64-3P**

RL: BAC (Biological activity or effector, except adverse); RCT (Reactant);
SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of novel thiazolidinediones having antidiabetic, hypolipidemic and antihypertensive properties)

RN 187340-64-3 CA

CN 2,4-Thiazolidinedione, 5-[[4-[2-[[[2,3-dihydro-2,2,4,6,7-pentamethyl-5-(phenylmethoxy)-3-benzofuranyl]methyl]methylamino]ethoxy]phenyl]methylene]- (9CI) (CA INDEX NAME)



L20 ANSWER 5 OF 24 CA COPYRIGHT 2000 ACS

ACCESSION NUMBER: 125:328500 CA

TITLE: Preparation of 5-hydroxy-2,3-dihydrobenzofurans as physiological free radical scavengers

INVENTOR(S): Marciniak, Gilbert; Schnettler, Richard A.; Ayers, Timothy A.; Krysan, Damian J.

PATENT ASSIGNEE(S): Hoechst Marion Roussel, Inc., USA

SOURCE: PCT Int. Appl., 106 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

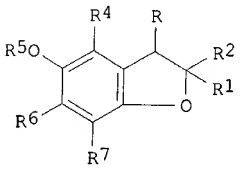
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9628437	A1	19960919	WO 1996-US1838	19960208 <--
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN				
EP 731096	A1	19960911	EP 1995-400518	19950310 <--
R: FR				

Page 3

AU 9649209	A1	19961002	AU 1996-49209	19960208 <--
AU 695575	B2	19980813		
EP 813530	A1	19971229	EP 1996-905455	19960208
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV				
JP 11501655	T2	19990209	JP 1996-527585	19960208
ZA 9601748	A	19960910	ZA 1996-1748	19960304 <--
US 5698696	A	19971216	US 1996-612366	19960307
FI 9703644	A	19970909	FI 1997-3644	19970909
NO 9704155	A	19971107	NO 1997-4155	19970909
AU 9887012	A1	19981112	AU 1998-87012	19980923
AU 705004	B2	19990513		
PRIORITY APPLN. INFO.:			EP 1995-400518	19950310
			AU 1996-49209	19960208
			WO 1996-US1838	19960208

OTHER SOURCE(S): MARPAT 125:328500
GI



I

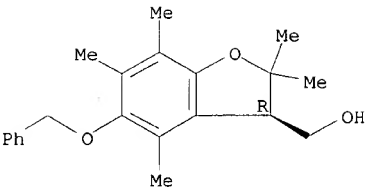
AB Title compds. [I; R = CH2OH, halomethyl, CH2NH2, (4-alkyl)piperazino, etc.; R1,R2 = alkyl; R1R2 = hydrocarbylene; R4,R6 = alkyl; R5 = H, CHO, alkanoyl; R7 = H or alkyl] were prepd. as physiol. free radical scavengers (no data). Thus, 1,4-dimethoxy-2,3,5-trimethylhydroquinone was cyclocondensed with Me2CBrCOBr and the product converted in 4 steps to I (R = CH2R3, R1 = R2 = R4 = R6 = R7 = Me, R5 = H)(II; R3 = Br) which was aminated by N-methylpiperazine to give II (R3 = 4-methylpiperazino).

IT **183142-43-0P**
RL: PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of 5-hydroxy-2,3-dihydrobenzofurans as physiol. free radical scavengers)

RN 183142-43-0 CA

CN 3-Benzofuranmethanol, 2,3-dihydro-2,2,4,6,7-pentamethyl-5-(phenylmethoxy)-, (R)- (9CI) (CA INDEX NAME)

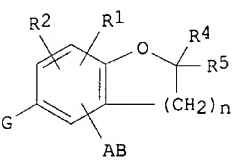
Absolute stereochemistry. Rotation (+).



L20 ANSWER 6 OF 24 CA COPYRIGHT 2000 ACS
ACCESSION NUMBER: 125:114620 CA
TITLE: Preparation of (imidazolylethyl)benzofuran derivatives as 5-lipoxygenase inhibitors
INVENTOR(S): Hasegawa, Tomoyuki; Hachitani, Katsutoshi; Nanbu, Fumio; Oonada, Shuichi
PATENT ASSIGNEE(S): Ono Pharmaceutical Co, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 120 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08109179	A2	19960430	JP 1994-270614	19941007 <--

OTHER SOURCE(S): MARPAT 125:114620
GI



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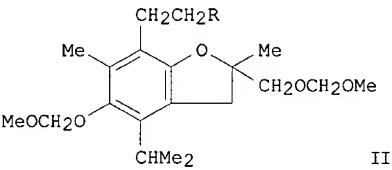

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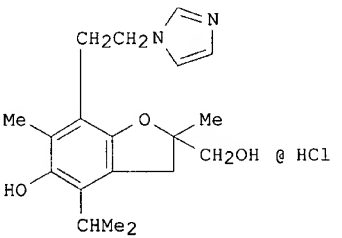


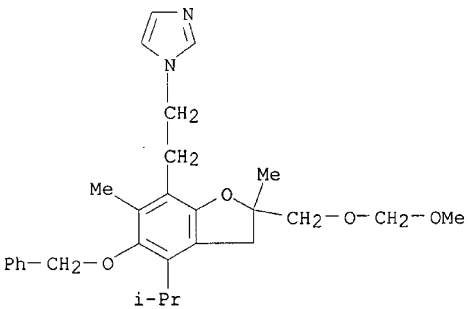
IV

AB The title compds. [I; A = C1-8 alkylene; B = 5-7-membered heterocycle contg. 1-2 N atoms; G = OH, C1-4 alkoxy, dialkylamino, etc.; R1, R2 = DE (wherein D = bond, C1-8 alkylene, etc.; E = OH, C1-4 alkyl, cyano, alkoxycarbonyl, etc.); R4, R5 = H, C1-8 alkyl, DE, etc.; n = 1-3], effective in treating and preventing thrombosis, atherosclerosis, etc., are prepd. and formulated. Mesylation of ethanol deriv. II (R = OH) (prepn. given) gave mesylate II (R = MeSO3), which was heated with imidazole in toluene with stirring at 100.degree. to give imidazole deriv.
II (R = 1-imidazolyl) (III). Hydrolysis of III with 4N HCl in MeOH gave diol salt IV, which showed 59% and 96% inhibition against LTB4 and TXB2, resp., at .mu.M.

IT **174856-27-0P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of (imidazolylethyl)benzofuran derivs. as 5-lipoxygenase inhibitors)

RN 174856-27-0 CA

CN 1H-Imidazole, 1-[2-[2,3-dihydro-2-[(methoxymethoxy)methyl]-2,6-dimethyl-4-(1-methylethyl)-5-(phenylmethoxy)-7-benzofuranyl]ethyl]- (9CI) (CA INDEX NAME)

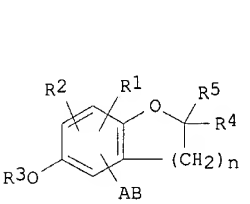


L20 ANSWER 7 OF 24 CA COPYRIGHT 2000 ACS
ACCESSION NUMBER: 124:261034 CA
TITLE: Preparation and formulation of dihydrobenzofuranylalkylimidazoles and analogs as antiinflammatory agents, antioxidants, and thromboxane A2 synthetase inhibitors
INVENTOR(S): Hasegawa, Tomoyuki; Hachitani, Katsutoshi; Nanbu, Fumio; Oonada, Shuichi
PATENT ASSIGNEE(S): Ono Pharmaceutical Co, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 55 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent

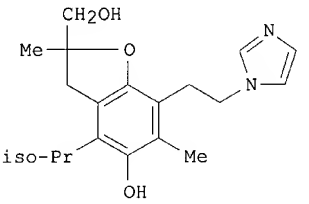
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07316150	A2	19951205	JP 1994-133575	19940524 <--

OTHER SOURCE(S): MARPAT 124:261034
GI



I

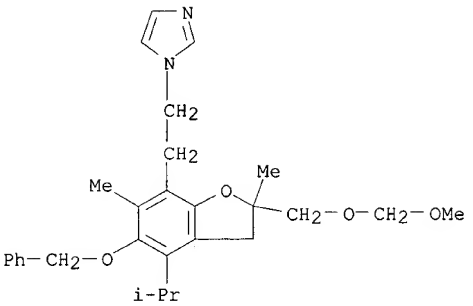


II

AB The title compds. I [R1, R2 = H, halo, etc.; A = alkylene, etc.; B = N-contg. heterocyclic ring; R3 = H, acyl, etc.; R4 = H, alkyl, phenylalkyl; R5 = DE; D = alkylene, etc.; E = NR9R10, etc.; R9, R10 = H, alkyl, etc.; n = 1 - 3] are prepd. The title compd. II.HCl was prepd. in a multistep process starting from 2-(2-pivaloyloxyethyl)-3-methyl-4-acetyloxy-5-isopropyl-6-(2-methyl-2-propenyl)phenol. II.HCl in vitro at 10 .mu.M gave 96% inhibition of thromboxane B2 formation.

IT **174856-27-0P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of dihydrobenzofuranylalkylimidazoles and analogs as antiinflammatory agents, antioxidants, and thromboxane A2 synthetase inhibitors)

RN 174856-27-0 CA
CN 1H-Imidazole,
1-[2-[2,3-dihydro-2-[(methoxymethoxy)methyl]-2,6-dimethyl-4-(1-methylethyl)-5-(phenylmethoxy)-7-benzofuranyl]ethyl]- (9CI) (CA INDEX NAME)



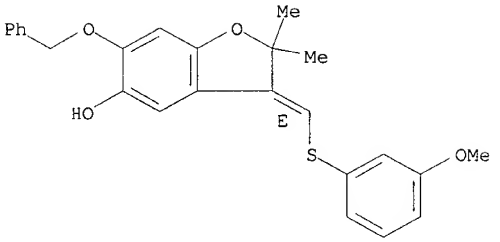
L20 ANSWER 8 OF 24 CA COPYRIGHT 2000 ACS
ACCESSION NUMBER: 124:231979 CA
TITLE: Contrasting reactivity in Lewis acid-promoted reactions of thio- and silyl-allenes with 1,4-benzoquinones
AUTHOR(S): Engler, Thomas A.; Agrios, Konstantinos; Reddy, Jayachandra P.; Iyengar, Rajesh
CORPORATE SOURCE: Dep. Chemistry, Univ. Kansas, Lawrence, KS, 66045-0046, USA
SOURCE: Tetrahedron Lett. (**1996**), 37(3), 327-30
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 124:231979

AB In Ti(IV)-promoted reactions with 2-methoxy-1,4-benzoquinones, thioallenes Me2C:C:CHSR (R = m-anisyl, Ph) give 2 + 2 and/or 3 + 2 products via attack on a C=C moiety of the quinone, whereas silylallene CH2:C:CMeSiMe3 gives products derived from attack on a carbonyl group of the quinone.

IT **174678-60-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(contrasting reactivity in Lewis acid-promoted reactions of thio- and silylallenes with benzoquinones)

RN 174678-60-5 CA
CN 5-Benzofuranol, 2,3-dihydro-3-[[(3-methoxyphenyl)thio]methylene]-2,2-dimethyl-6-(phenylmethoxy)-, (E)- (9CI) (CA INDEX NAME)

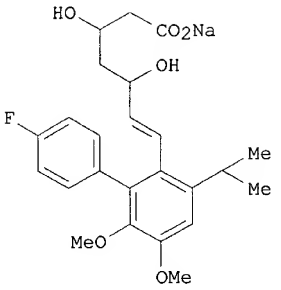
Double bond geometry as shown.



L20 ANSWER 9 OF 24 CA COPYRIGHT 2000 ACS
ACCESSION NUMBER: 123:82949 CA
TITLE: Methods of producing arylcarboxylic ester derivatives as antihypercholesteremic agents
INVENTOR(S): Watanabe, Masakatsu; Watanabe, Nobuko; Mori, Eiko; Kobayashi, Hisako; Ikawa, Hiroshi
PATENT ASSIGNEE(S): Fujirebio, Inc., Japan
SOURCE: Eur. Pat. Appl., 70 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
EP 643054	A2	19950315	EP 1994-112455	19940809	<--
EP 643054	A3	19950503			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE					
JP 07101905	A2	19950418	JP 1994-207944	19940809	<--
US 5481009	A	19960102	US 1994-288197	19940809	<--
JP 07112950	A2	19950502	JP 1994-222689	19940825	<--
US 5599952	A	19970204	US 1995-444372	19950518	<--
PRIORITY APPLN. INFO.:			JP 1993-214812	19930809	
			JP 1993-230769	19930825	
			US 1994-288197	19940809	

OTHER SOURCE(S): MARPAT 123:82949
GI



III

AB Title compds. R4CH(OH)CH2CH(R1O)CH2CH(R2O)CH2CO2R3 (I) and R4CH:CHCH(R1O)CH2CH(R2O)CH2CO2R3 (II) (R1, R2 = hydroxy protectant; R1R2 = hydroxy protectant; R3 = C1-12 alkyl, aryl; R4 = aryl, heterocyclyl, vinyl, cycloalkenyl all substituted) having an inhibitory effect on HMG-CoA reductase (3-hydroxy-3-methylglutaryl-COA reductase) are prepd. I are prepd. by reacting a formyl(substituted hydroxy)alkanecarboxylate ester wit an organometallic reagent and II are prepd. by subjecting I to dehydration. Intermediates for I and II were also prepd. (E)-I (R1R2 = 3,5-O-isopropylidene, R3 = Et, R4 = [4'-fluoro-5,6-dimethoxy-3(propan-2-yl)biphenyl-2-yl]) (prepn. given) was dehydrated and this was deprotected, and the deprotected compd. in EtOH was reacted with NaOH to give the title compd. III. In a test for biol. activity III at 0.3 mg/kg inhibited 73% sterol synthesis in rats, compared to 16 and 41% for pravastatin and simvastatin, resp.

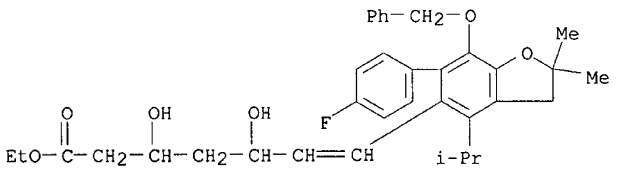
IT **159463-06-6P**

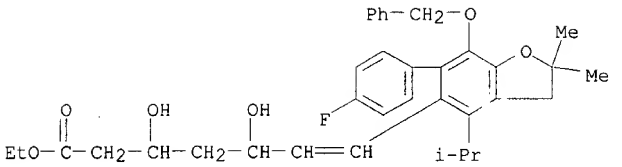
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(methods of producing arylcarboxylic ester derivs. as antihypercholesteremic agents)

RN 159463-06-6 CA

CN 6-Heptenoic acid, 7-[6-(4-fluorophenyl)-2,3-dihydro-2,2-dimethyl-4-(1-methylethyl)-7-(phenylmethoxy)-5-benzofuranyl]-3,5-dihydroxy-, ethyl ester (9CI) (CA INDEX NAME)

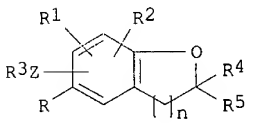




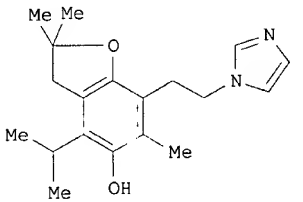
L20 ANSWER 10 OF 24 CA COPYRIGHT 2000 ACS
ACCESSION NUMBER: 122:314550 CA
TITLE: Preparation of (imidazolylalkyl)benzofurans and analogs as TXA2 synthetase and 5-lipoxygenase inhibitors and oxygen scavengers
INVENTOR(S): Ohuchida, Shuichi; Nambu, Fumio; Toda, Masaaki
PATENT ASSIGNEE(S): Ono Pharmaceutical Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 151 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 640609	A1	19950301	EP 1994-306175	19940822 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CA 2117551	AA	19950225	CA 1994-2117551	19940823 <--
JP 07112980	A2	19950502	JP 1994-221003	19940823 <--
US 5534536	A	19960709	US 1994-294015	19940823 <--
CN 1110969	A	19951101	CN 1994-117330	19940824 <--
US 5750544	A	19980512	US 1996-635318	19960419
PRIORITY APPLN. INFO.:			JP 1993-231004	19930824
			US 1994-294015	19940823

OTHER SOURCE(S): MARPAT 122:314550
GI



I



II

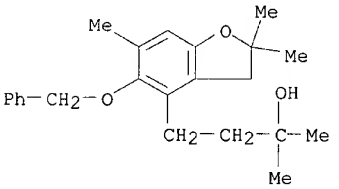
AB Title compds. [I; R = OH, alkoxy, OBz, (di)(alkyl)amino, etc.; R1,R2 = H, halo, (cyclo)alkyl, alkoxy, etc.; R3 = 1 or 2 N-contg. heterocyclyl; R4,R5

= H, (phenyl)alkyl; CR4R5 = cycloalkyl; Z = alk(en)ylene, alkyleneoxy, (CH2)1-6OZ1; Z1 = 1,4-phenylene; n = 1-3] were prepd. Thus, title compd. II.HCl, prepd. in 14 steps from 3-isopropyl-5-methylphenol, gave 74 and 92% inhibition of LTB4 and TXB2 prodn. in whole human blood at 10.mu.M in vitro.

IT **162963-26-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of (imidazolylalkyl)benzofurans and analogs as TXA2 synthetase and 5-lipoxygenase inhibitors and oxygen scavengers)

RN 162963-26-0 CA

CN 4-Benzofuranpropanol, 2,3-dihydro-.alpha.,.alpha.,2,2,6-pentamethyl-5-(phenylmethoxy)- (9CI) (CA INDEX NAME)



L20 ANSWER 11 OF 24 CA COPYRIGHT 2000 ACS

ACCESSION NUMBER: 122:160427 CA

TITLE: Synthesis of a new type of antioxidant possessing inhibitory activity against HMG-CoA reductase

AUTHOR(S): Matsumoto, Masakatsu; Watanabe, Nobuko; Mori, Eiko; Aoyama, Misao; Kusunoki, Jun; Yamaura, Tetsuaki

CORPORATE SOURCE: Dep. Materials Sci., Kanagawa Univ., Kanagawa, 259-12, Japan

SOURCE: Heterocycles (**1994**), 38(12), 2589-92
CODEN: HTCYAM; ISSN: 0385-5414

DOCUMENT TYPE: Journal

LANGUAGE: English

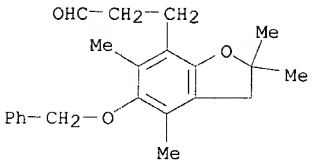
OTHER SOURCE(S): CASREACT 122:160427

AB The 6-hydroxychromans and 5-hydroxy-2,3-dihydrobenzo[b]furans bearing a 4-hydroxypyran-2-one moiety were synthesized. All the compds. exhibited potent activity against lipid peroxidn.

IT **137418-50-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of a new type of antioxidant possessing inhibitory activity against HMG-CoA reductase)

RN 137418-50-9 CA

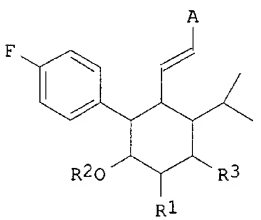
CN 7-Benzofuranpropanal, 2,3-dihydro-2,2,4,6-tetramethyl-5-(phenylmethoxy)- (9CI) (CA INDEX NAME)



L20 ANSWER 12 OF 24 CA COPYRIGHT 2000 ACS
ACCESSION NUMBER: 122:9671 CA
TITLE: Preparation of 4-fluorobiphenyl derivatives as cholesterol lowering agents.
INVENTOR(S): Matsumoto, Masakatsu; Watanabe, Nobuko; Mori, Eiko; Ichihara, Miwa; Yamaura, Tetsuaki; Aoyama, Misao; Ikawa, Hiroshi; Kobayashi, Hisako
PATENT ASSIGNEE(S): Fujirebio Inc., Japan
SOURCE: Eur. Pat. Appl., 80 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
EP 617000	A2	19940928	EP 1994-104914	19940328	<--
EP 617000	A3	19941102			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE					
JP 06329582	A2	19941129	JP 1994-79350	19940325	<--
US 5523460	A	19960604	US 1994-218186	19940328	<--
PRIORITY APPLN. INFO.:			JP 1993-90557	19930326	

OTHER SOURCE(S): MARPAT 122:9671
GI



I

AB Title compds. I (A = .omega.-oxycarbonyldihydroxybutyl, 4-hydroxy-2-oxotetrahydropyranyl, alk. metal, alk. earth metal, .omega.-oxycarbonyl-3-oxobutyl, HCO, NC; R1 = halo, (substituted) C1-6 alkyl, HO, (substituted) C1-6 alkoxy; R2, R3 = H, (substituted) C1-6

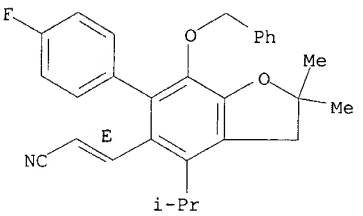
alkyl, etc.) are prepd. (E)-I (A = EtO2CCH2CH(OH)CH2CH(OH)CH:CH, R1 = MeO, R2 = R3 = H) Na salt (prepn. given) in DMF was reacted with MeI and K2CO3 to give (E)-I (A = EtO2CCH2CH(OH)CH2CH(OH)CH:CH, R1 = R2 = Me, R3 = H) which at 0.3/5mL/kg in rats inhibited sterol synthesis 71%.

IT **159463-03-3P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 4-fluorobiphenyl derivs. as cholesterol lowering agents.)

RN 159463-03-3 CA

CN 2-Propenenitrile, 3-[6-(4-fluorophenyl)-2,3-dihydro-2,2-dimethyl-4-(1-methylethyl)-7-(phenylmethoxy)-5-benzofuranyl]-, (E)- (9CI) (CA INDEX NAME)

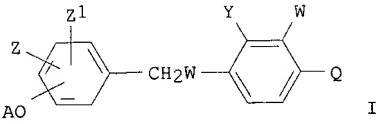
Double bond geometry as shown.



L20 ANSWER 13 OF 24 CA COPYRIGHT 2000 ACS
ACCESSION NUMBER: 121:248647 CA
TITLE: Herbicidal 2-((4-heterocyclic-phenoxymethyl)phenoxy)-alkanoates
INVENTOR(S): Theodoridis, George
PATENT ASSIGNEE(S): FMC Corp., USA
SOURCE: U.S., 26 pp. Cont.-in-part of U.S. 5,262,390.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5344812	A	19940906	US 1993-107560	19930817 <--
US 5262390	A	19931116	US 1992-935601	19920826 <--
US 5798316	A	19980825	US 1997-865306	19970529
PRIORITY APPLN. INFO.:			US 1992-935601	19920826
			US 1993-107560	19930817
			US 1995-523991	19950905

OTHER SOURCE(S): MARPAT 121:248647
GI



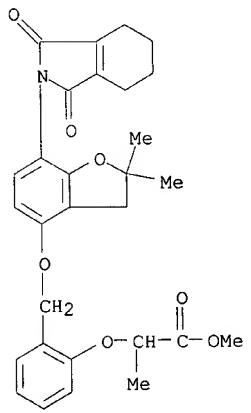
I

AB Herbicidal compds., compns. contg. them, and a method for controlling weeds by application of the compns. are disclosed. The herbicidal compds.
are 2-[(4-heterocyclic-phenoxymethyl)phenoxy]alkanoates (I) in which A is a deriv. of an alkanoate bonded to the phenoxy oxygen at the alpha carbon,
and Q is 4-difluoromethyl-4,5-dihydro-3-methyl-1,2,4-triazol-5(1H)-on-1-yl, 3,4,5,6-tetrahydrophthalimid-1-yl, 1,(1-methylethyl)imidazolidin-2,4-dion-3-yl, 1,4-dihydro-4-(3-fluoropropyl)-5H-tetrazol-5-on-1-yl, 3-chloro-4,5,6,7-tetrahydroindazol-2-yl, 4-methyl-1,2,4-triazine-3,5-dion-2-yl, 8-thia-1,6-diazabicyclo[4.3.0]-nonane-7-on-9-ylimino, or 1-methyl-6-trifluoromethyl-2,4-pyrimidinedione-3-yl; X is H, Me, F, or Cl;
Y is H; W is O or S; Z is H, F, Cl, Br, lower alkyl, or methoxy; Z1 is H, F, or Cl; and the group AO-may be in the 2,3 or 4-position of the Ph ring.

IT **158755-65-8P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and postemergence herbicidal activity of)

RN 158755-65-8 CA

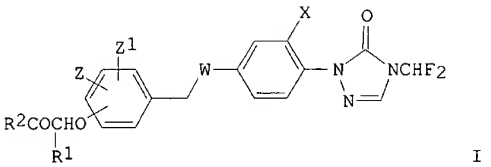
CN Propanoic acid, 2-[2-[[[7-(1,3,4,5,6,7-hexahydro-1,3-dioxo-2H-isoindol-2-yl)-2,3-dihydro-2,2-dimethyl-4-benzofuranyl]oxy]methyl]phenoxy]-, methyl ester (9CI) (CA INDEX NAME)



L20 ANSWER 14 OF 24 CA COPYRIGHT 2000 ACS
ACCESSION NUMBER: 120:270406 CA
TITLE: 2-[(4-Triazolonylphenoxymethyl)phenoxy]alkanoate herbicides
INVENTOR(S): Theodoridis, George
PATENT ASSIGNEE(S): FMC Corp., USA
SOURCE: U.S., 24 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
US 5262390	A	19931116	US 1992-935601	19920826	<--
US 5344812	A	19940906	US 1993-107560	19930817	<--
IL 106734	A1	19981227	IL 1993-106734	19930819	
WO 9404514	A1	19940303	WO 1993-US7837	19930825	<--
W: AT, AU, BB, BG, BR, BY, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, VN					
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG					
EP 656892	A1	19950614	EP 1993-920234	19930825	<--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE					
HU 70890	A2	19951128	HU 1995-603	19930825	<--
JP 08501774	T2	19960227	JP 1993-506546	19930825	<--
JP 2652084	B2	19970910			
AU 671311	B2	19960822	AU 1993-50833	19930825	<--
CZ 282413	B6	19970716	CZ 1995-518	19930825	
PL 172588	B1	19971031	PL 1993-307728	19930825	
CA 2143323	C	19971223	CA 1993-2143323	19930825	
RU 2113434	C1	19980620	RU 1995-108542	19930825	
RO 114254	B1	19990226	RO 1995-441	19930825	
CN 1083479	A	19940309	CN 1993-116971	19930826	<--
CN 1035434	B	19970716			
ZA 9306274	A	19940316	ZA 1993-6274	19930826	<--
FI 9500865	A	19950420	FI 1995-865	19950224	<--
NO 9500705	A	19950424	NO 1995-705	19950224	<--
US 5798316	A	19980825	US 1997-865306	19970529	
PRIORITY APPLN. INFO.:			US 1992-935601	19920826	
			US 1993-107560	19930817	
			WO 1993-US7837	19930825	
			US 1995-523991	19950905	

OTHER SOURCE(S): MARPAT 120:270406
GI



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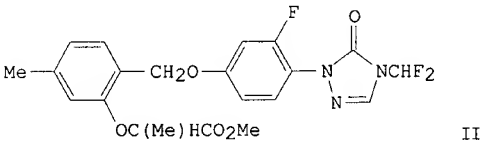


II

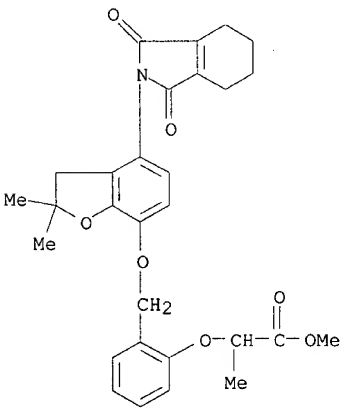
AB The title compds. [I; R1 = H, Me; R2 = OR, NH2, PhNH, alkylamino, alkenylamino, alkoxyamino, CN, etc.; R = lower alkyl, etc.; W = O, S; X, Z1 = H, F, Cl; Z = H, F, Cl, Br, lower alkyl, MeO], useful in controlling unwanted plant growth such as grassy or broadleaf plant species, are prepd. Thus, triazolone II, prepd. from 3,4-difluoronitrobenzene in 9 steps, demonstrated pronounced herbicidal activity against a wide variety of plant species.

IT **154080-59-8P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and herbicidal activity)

RN 154080-59-8 CA

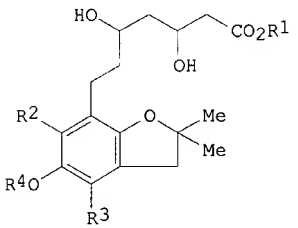
CN Propanoic acid, 2-[2-[[[4-(1,3,4,5,6,7-hexahydro-1,3-dioxo-2H-isoindol-2-yl)-2,3-dihydro-2,2-dimethyl-7-benzofuranyl]oxy]methyl]phenoxy]-, methyl ester (9CI) (CA INDEX NAME)



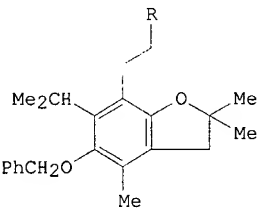
L20 ANSWER 15 OF 24 CA COPYRIGHT 2000 ACS
ACCESSION NUMBER: 119:225796 CA
TITLE: Preparation of 7-(2,3-dihydrobenzo[b]furan-7-yl)-3,5-dihydroxyheptanoic acid derivatives as 3-hydroxy-3-methylglutaryl (HMG)-coenzyme A reductase inhibitors
INVENTOR(S): Matsumoto, Masakatsu; Watanabe, Nobuko; Mori, Hideko
PATENT ASSIGNEE(S): Fujirebio Kk, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 22 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05051372	A2	19930302	JP 1991-232477	19910821 <--
JP 2870244	B2	19990317		

OTHER SOURCE(S): MARPAT 119:225796
GI

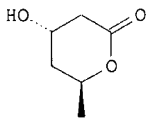


I



II

Q=



AB Title compds. [I; R1 = H, alkali or alk. earth metal; R2, R3 = H, lower alkyl; R4 = H, lower alkyl or alkenyl, aryl, aralkyl, acyl, aroyl, (un)substituted sulfonyl], useful as anticholesteremics and for the treatment of arteriosclerosis, are prepd. Thus, aldol condensation of aldehyde (II; R = CHO) (prepn. given) with MeCOCH2CO2Et in the presence of NaH in THF and redn.-cyclization (lactonization) of the resulting II [R = CH(OH)CH2COCH2CO2Et] by treatment with pivalic acid and Et3B in THF at -78.degree. at room temp., cooling to -78.degree., addn. of MeOH, redn. with NaBH4, oxidn. with 30% H2O2, acidification with 1 N HCl, and

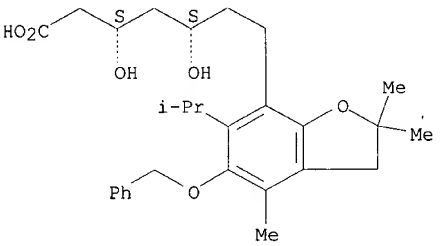
refluxing the intermediate in PhMe gave II (R = Q) which was sapond. with 1 N aq. NaOH in aq. acetone to give I (R1 = Na, R2 = iso-Pr, R3 = Me, R4 =
PhCH2) (III). III was 2.7 times more effective in reducing the serum cholesterol level than compactin (ML-236B) in Triton-induced hyperlipidemic rats.

IT **150552-27-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as hydroxymethylglutaryl CoA reductase inhibitor and anticholesteremic)

RN 150552-27-5 CA

CN 7-Benzofuranheptanoic acid, 2,3-dihydro-.beta.,.delta.-dihydroxy-2,2,4-trimethyl-6-(1-methylethyl)-5-(phenylmethoxy)-, monosodium salt, (R*,R*)-(9CI) (CA INDEX NAME)

Relative stereochemistry.



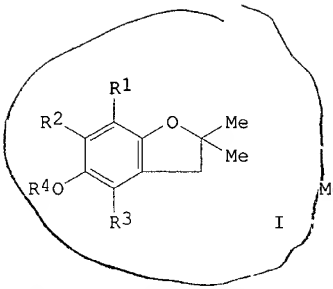
● Na

L20 ANSWER 16 OF 24 CA COPYRIGHT 2000 ACS
ACCESSION NUMBER: 119:139070 CA
TITLE: Preparation of benzofuran derivatives
INVENTOR(S): Matsumoto, Masakatsu; Watanabe, Nobuko; Mori, Hideko
PATENT ASSIGNEE(S): Fujirebio, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 36 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

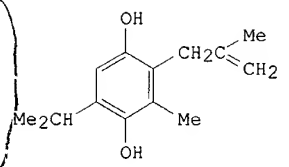
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04300878	A2	19921023	JP 1991-87229	19910328 <--

OTHER SOURCE(S): MARPAT 119:139070
GI

163



I



II

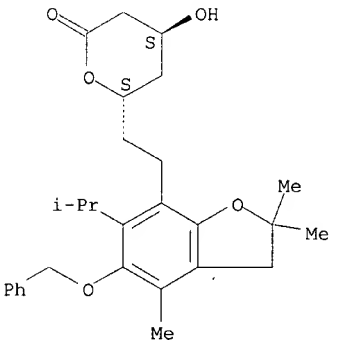
AB Benzofuran derivs. [I; R1 = H, halo, HCO, CH2CH2CHO, etc.; R2, R3 = H, alkyl; R4 = H, alkyl, alkenyl, aryl, aralkyl, acyl, aroyl, substituted sulfonyl], useful as intermediates for HMG-CoA reductase inhibitors, are prepd. Hydroquinone deriv. II (13.2 g) (prepn. given) was dissolved in CH2Cl2 and stirred with BF3-Et2O at 0.degree. under Ar to give 12.3 g I (R1 = R4 = H, R2 = Me2CH, R3 = Me), which was refluxed with PhCH2Br and K2CO3 in DMF-DME under Ar to give 10.8 g benzyl ether I (R4 = PhCH2, others remain unchanged).

IT **137443-49-3**
RL: RCT (Reactant)
(intermediates for, benzofuran derivs. as)

RN 137443-49-3 CA

CN 2H-Pyran-2-one, 6-[2-[2,3-dihydro-2,2,4-trimethyl-6-(1-methylethyl)-5-(phenylmethoxy)-7-benzofuranyl]ethyl]tetrahydro-4-hydroxy-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L20 ANSWER 17 OF 24 CA COPYRIGHT 2000 ACS

ACCESSION NUMBER: 119:116957 CA

TITLE: Preparation of propenylhydroquinone and propenylbenzoquinone derivatives

INVENTOR(S): Matsumoto, Masakatsu; Watanabe, Nobuko; Mori, Hideko

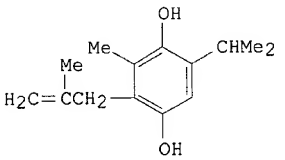
PATENT ASSIGNEE(S): Fujirebio, Inc., Japan

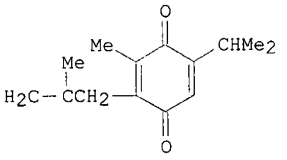
SOURCE: Jpn. Kokai Tokkyo Koho, 30 pp.
CODEN: JKXXAF

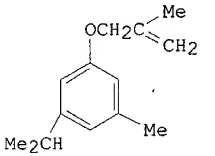
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

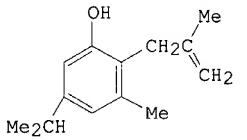
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04356435	A2	19921210	JP 1991-47443	19910221 <--

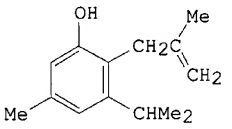
OTHER SOURCE(S): MARPAT 119:116957
GI


I


II


III

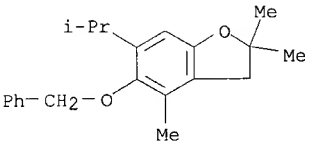

IV


V

AB The title compds., e.g., I, II, useful as intermediates for HMG-CoA reductase inhibitors, are prepd. Heating a soln. of methallyl ether III in PhNEt2 at 200-210.degree. under Ar gave a 3:2 mixt. of IV and V, which was oxidized over salcomin at 0.degree. atm. to give a 2:1 mixt. of II and its isomer. Redn. of the above mixt. with NaBH4 in CH2Cl2-MeOH at 0.degree. under Ar gave an 8:1 mixt. of I and its isomer.

IT **137443-41-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, in prepn. of HMG-CoA reductase inhibitor intermediate)

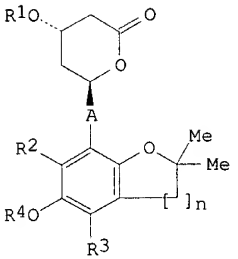
RN 137443-41-5 CA
CN Benzofuran, 2,3-dihydro-2,2,4-trimethyl-6-(1-methylethyl)-5-(phenylmethoxy)- (9CI) (CA INDEX NAME)



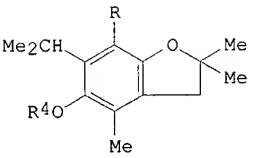
L20 ANSWER 18 OF 24 CA COPYRIGHT 2000 ACS
ACCESSION NUMBER: 115:256433 CA
TITLE: Preparation of 6-(7-benzofuranylethyl)-4-hydroxytetrahydropyran-2-ones and analogs as HMG-CoA reductase inhibitors
INVENTOR(S): Matsumoto, Masakatsu; Watanabe, Nobuko; Mori, Eiko; Kusunoki, Jun
PATENT ASSIGNEE(S): Fujirebio, Inc., Japan
SOURCE: Eur. Pat. Appl., 106 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
EP 445827	A2	19910911	EP 1991-103526	19910307	<--
EP 445827	A3	19920527			
EP 445827	B1	19960925			
R: CH, DE, FR, GB, IT, LI, NL					
JP 03258778	A2	19911119	JP 1990-53489	19900307	<--
JP 2838430	B2	19981216			
JP 04036280	A2	19920206	JP 1990-141492	19900601	<--
JP 2877446	B2	19990331			
JP 04036260	A2	19920206	JP 1990-141493	19900601	<--
JP 04066581	A2	19920302	JP 1990-175392	19900704	<--
US 5149834	A	19920922	US 1991-665666	19910307	<--
PRIORITY APPLN. INFO.:			JP 1990-53489	19900307	
			JP 1990-141492	19900601	
			JP 1990-141493	19900601	
			JP 1990-175392	19900704	

OTHER SOURCE(S): MARPAT 115:256433
GI



I



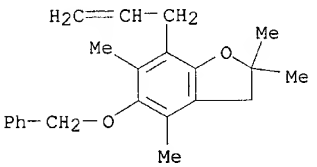
II

AB Title compds. [I; A = CH2CH2, CH:CH; R1 = H, 2-tetrahydropyranyl; R2,R3 = H, alkyl; R4 = H, (ar) alkyl, acyl, etc.; n = 1,2] were prepd. Thus, 3,5-Me(Me2CH)C6H3OH was O-alkylated with ClCH2CMe:CH2 and the Claisen-rearranged product converted in 3 steps to benzofuran II (R = CH2CH2CHO, R4 = PhCH2) which was condensed with MeCOCH2CO2Et to give II [R = CH2CH2CH(OH)CH2COCH2CO2Et, R4 = PhCH2]. The latter was cyclized to give, after O-dealkylation and O-acylation, I (A = CH2CH2, R = H, R2 = CHMe2, R3 = Me, R4 = Bz, n = 1) which gave 2.2 times the redn. of serum cholesterol as compactin (doses not given) in hyperlipemic rats.

IT **137418-48-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, in prepn. of HMG-CoA reductase inhibitors)

RN 137418-48-5 CA

CN Benzofuran, 2,3-dihydro-2,2,4,6-tetramethyl-5-(phenylmethoxy)-7-(2-propenyl)- (9CI) (CA INDEX NAME)



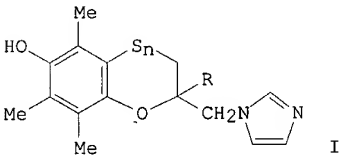
L20 ANSWER 19 OF 24 CA COPYRIGHT 2000 ACS

ACCESSION NUMBER:	115:183329 CA
TITLE:	Preparation of 1-[(benzofuranyl or benzoxathiinyl)methyl]imidazoles for treating liver diseases
INVENTOR(S):	Matsuo, Kyoko; Sakane, Soichi; Shiono, Manzo; Yamahara, Joji
PATENT ASSIGNEE(S):	Kuraray Co., Ltd., Japan
SOURCE:	Jpn. Kokai Tokkyo Koho, 8 pp. CODEN: JKXXAF
DOCUMENT TYPE:	Patent
LANGUAGE:	Japanese

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03066685	A2	19910322	JP 1989-203529	19890805 <--

OTHER SOURCE(S): MARPAT 115:183329
GI

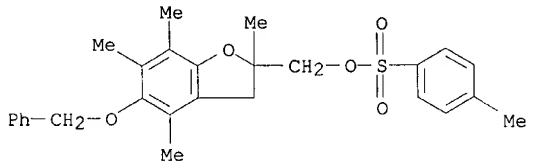


I

AB The title compds. I (R = H, lower alkyl; n = 0, 1) or their pharmacol. acceptable salts are prepd. A mixt. of 2,3-dihydro-2,4,6,7-tetramethyl-2-(p-toluenesulfonyloxymethyl)benzofuran-5-ol and imidazole in toluene was refluxed for 30 min to give 81% I (R = Me, n = 0) (II). II inhibited increase of glutamic-oxaloacetic transaminase and glutamic-pyruvic transaminase activities in mice with CCl4-induced liver failure. A compn. contg. II 100, corn starch 145, carboxycellulose 40, poly(vinylpyrrolidone) 9, and Ca stearate was made into 1000 tablets.

IT **136480-83-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and debenzylation of)

RN 136480-83-6 CA
CN 2-Benzofuranmethanol, 2,3-dihydro-2,4,6,7-tetramethyl-5-(phenylmethoxy)-, 4-methylbenzenesulfonate (9CI) (CA INDEX NAME)

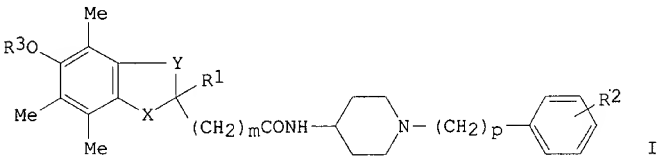


L20 ANSWER 20 OF 24 CA COPYRIGHT 2000 ACS
ACCESSION NUMBER: 114:101710 CA
TITLE: Preparation of benzoheterocycles and their use as pharmaceuticals
INVENTOR(S): Matsuo, Kyoko; Sakane, Soichi; Shiono, Manzo; Yamahara, Joji; Tawara, Tetsuji; Setoguchi, Michihide;

Terasawa, Michio
PATENT ASSIGNEE(S): Kuraray Co., Ltd., Japan; Yoshitomi Pharmaceutical Industries, Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02215779	A2	19900828	JP 1989-35702	19890214 <--

OTHER SOURCE(S): MARPAT 114:101710
GI

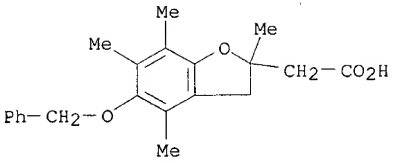


I

AB Title compds. I [R1 = H, lower alkyl; R2 = H, lower alkoxy, halo, cyano; R3 = H, acyl, lower alkoxycarbonyl, pyridylmethyl; X = O, S; Y = CH2, (CH2)2, SCH2; m = 0-2; p = 1, 2] or their pharmacol. acceptable salts, useful for treatment of allergy and disorders caused by leukotrienes, histamine, and lipid peroxidn., are prepd. I (R1, R2, X, Y, m, p = same as above; R3 = arylmethyl) are also prepd. as intermediates. Refluxing (6-benzyloxy-3,4-dihydro-2,5,7,8-tetramethyl-2H-benzopyran-2-yl)carboxylic acid with SOCl2 in C6H6-DMF mixt. for 2 h, then treatment with 4-amino-1-(2-phenylethyl)piperidine at room temp. overnight gave 14.8% I (R1 = Me, R2 = H, R3 = PhCH2, X = O, Y = CH2CH2, m = 0, p = 2), which was hydrogenated over Pd/C in HCl-EtOH at room temp. overnight to afford 54.4% I (R1 = Me, R2 = R3 = H, X = O, Y = CH2CH2, m = 0, p = 2) (II). In passive cutaneous anaphylaxis reaction II at 25 mg/kg i.p. in rats exhibited the allergic reaction with pA2 and pD2 of 8.05 and 4.64, resp.

IT **132217-47-1**
RL: RCT (Reactant)
(amidation of, with aminopiperidine deriv.)

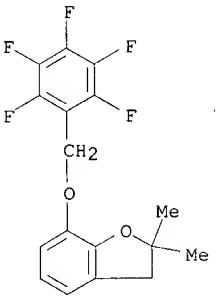
RN 132217-47-1 CA
CN 2-Benzofuranacetic acid,
2,3-dihydro-2,4,6,7-tetramethyl-5-(phenylmethoxy)-
(9CI) (CA INDEX NAME)



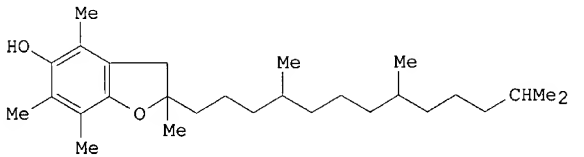
L20 ANSWER 21 OF 24 CA COPYRIGHT 2000 ACS
ACCESSION NUMBER: 113:35960 CA
TITLE: Gas chromatographic and spectral properties of pentafluorobenzyl derivatives of 2,4-dichlorophenoxyacetic acid and phenolic pesticides and metabolites
AUTHOR(S): Cline, Richard E.; Todd, Glenn D.; Ashley, David L.; Grainger, James; McCraw, Joan M.; Alley, Cynthia C.; Hill, Robert H., Jr.
CORPORATE SOURCE: Div. Environ. Health Lab. Sci., Cent. Environ. Health Inquiry Control, Atlanta, GA, 30333, USA
SOURCE: J. Chromatogr. Sci. (**1990**), 28(4), 167-72
CODEN: JCHSBZ; ISSN: 0021-9665
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Eleven phenols and 2,4-D, compds. that may be found in body fluids of humans exposed to pesticides, are derivatized with pentafluorobenzyl bromide and characterized by gas chromatog. with electron capture detection. These derivs. are further characterized by pos. and neg. chem. ionization mass spectrometry, NMR spectroscopy, and GC-Fourier transform IR spectroscopy. Neg. chem. ionization mass spectra of all derivs. have an anionic base peak derived from the parent analyte. In the pos. mode the nonchlorinated derivs. have base peaks indicative of the analyte, while chlorinated derivs. are cleaved to give the pentafluorobenzyl cation as base peak. The possibility is explored that ortho-substituted phenols might be formed as byproducts in these derivatizations.

IT **127923-91-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and gas chromatog. and spectral properties of)
RN 127923-91-5 CA
CN Benzofuran, 2,3-dihydro-2,2-dimethyl-7-[(pentafluorophenyl)methoxy]- (9CI)
(CA INDEX NAME)



L20 ANSWER 22 OF 24 CA COPYRIGHT 2000 ACS
ACCESSION NUMBER: 110:75833 CA
TITLE: Chiral effects on the carbon-13 resonances of .alpha.-tocopherol and related compounds. A novel illustration of Newman's "rule of six"
AUTHOR(S): Brownstein, S.; Burton, G. W.; Hughes, L.; Ingold, K. U.
CORPORATE SOURCE: Div. Chem., Natl. Res. Counc. Canada, Ottawa, ON, K1A 0R6, Can.
SOURCE: J. Org. Chem. (**1989**), 54(3), 560-9
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 110:75833
GI



I

AB The 100-MHz 13C-NMR spectrum of (2R,4'R,8'R)-.alpha.-tocopherol (natural vitamin E) was completely assigned with the aid of a no. of selectively deuterated (2R,4'R,8'R)-.alpha.-tocopherols. The 13C-NMR spectrum of (2RS,4'RS,8'RS)-.alpha.-tocopherol (all-racemic, synthetic vitamin E) was also detd. Many of the individual carbons in this all-racemic mixt. of 8 .alpha.-tocopherol stereoisomers give more than one resonance with 8 of the carbons (2-CH3, 2', 3', 4', 4'-CH3, 5', 8', and 9') giving the max. no. of 4 resonances from each of the 4 enantiomeric pairs; these resonances were also assigned. The structurally related 5-hydroxy-2'-(4',8',12'-trimethyltridecyl)-2,4,6,7-tetramethyl-2,3-dihydrobenzofuran (I) was synthesized for the first time in the 2R,4'R,8'R

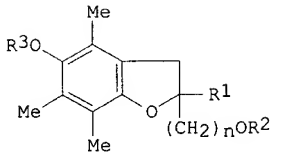
and 2S,4'R,8'R configurations and their 13C-NMR resonances were assigned. In its all-racemic form this compd. also shows up to 4 resonances from a single carbon. Related observations were made with phytol and isophytol. A careful examn. of these chirally induced chem. shift differences for the individual carbon atoms, .DELTA., reveals a bond-alternation effect with max. at a sepn. of one, three, and five bonds from the closest chiral center and with the max. at a five-bond sepn. being greater than that at a three-bond sepn. For example, the total .DELTA., .sum..DELTA., averaged over the no. of carbon atoms, n, which are sepd. from the nearest chiral center by the same no. of bonds was conservatively calcd. for .alpha.-tocopherol to be 54, 106, 43, 66, 40, and 75 ppb at sepns. from the closest chiral center of zero, one, two, three, four, and five bonds, resp. For I the corresponding .sum..DELTA./n values are 45, 67, 12, 0, 0, and 20 ppb. We attribute these remarkable long-range (five-bond) effects to differences in 1,6 nonbonded repulsions for different enantiomeric pairs and consider that it provides direct evidence for the operation of Newman's classic "rule of six".

IT **118017-25-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and oxidn. of)
RN 118017-25-7 CA

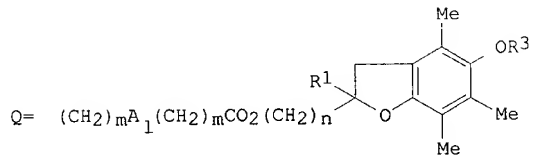
L20 ANSWER 23 OF 24 CA COPYRIGHT 2000 ACS
ACCESSION NUMBER: 110:75294 CA
TITLE: Dihydrobenzofuran derivatives as antioxidants and drug intermediates
INVENTOR(S): Ejiri, Katsuji; Shiono, Manzo; Fujita, Yoshiji
PATENT ASSIGNEE(S): Kuraray Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

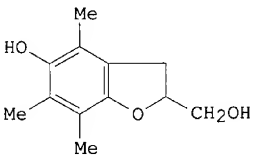
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63088173	A2	19880419	JP 1986-234013	19860930 <--
JP 05072908	B4	19931013		

OTHER SOURCE(S): MARPAT 110:75294
GI



I





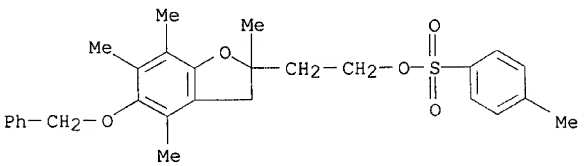
II

AB The title compds. I [R1 = H, lower alkyl; R2 = H, COR4; R3 = H, OH-protecting group; n = 1-3; R4 = (substituted) alkyl, Q; A = S; m = 1-4; l = 0 or 1], useful as antioxidants and as intermediates for antioxidant therapeutic agents, were prepd. Treatment of 2-bromo-1,4-bis[1-(ethoxy)ethoxy]-3,5,6-trimethylbenzene with Mg, followed by reaction with CH2:CHCH2Br, oxidn. with m-ClC6H4CO2OH, and heating of the product in EtOH-HCl at 60.degree., gave dihydrobenzofuran II. II has a peroxide value of 162 meq/kg in an in vitro test using Et linolate.

IT **118238-39-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, in prepn. of antioxidant and drug intermediate)

RN 118238-39-4 CA

CN 2-Benzofuranethanol, 2,3-dihydro-2,4,6,7-tetramethyl-5-(phenylmethoxy)-, 4-methylbenzenesulfonate (9CI) (CA INDEX NAME)

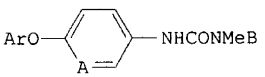


L20 ANSWER 24 OF 24 CA COPYRIGHT 2000 ACS
ACCESSION NUMBER: 107:236509 CA
TITLE: Processes for the preparation of novel urea derivatives as herbicides
INVENTOR(S): Takematsu, Tetsuo; Fukuoka, Daisuke; Takahashi, Katsuya; Hashimoto, Isao
PATENT ASSIGNEE(S): Mitsui Petrochemical Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 189 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
WO 8700840	A1	19870212	WO 1986-JP398	19860804	<--
W: BR, HU, KR, SU, US					
RW: AT, CH, DE, FR, GB, IT, NL					
JP 63010779	A2	19880118	JP 1986-177858	19860730	<--
JP 03060829	B4	19910917			
EP 230475	A1	19870805	EP 1986-904918	19860804	<--
EP 230475	B1	19920318			
R: AT, CH, DE, FR, GB, IT, LI, NL					
HU 43943	A2	19880128	HU 1986-3830	19860804	<--
HU 203334	B	19910729			
AT 73798	E	19920415	AT 1986-904918	19860804	<--
CA 1324147	A1	19931109	CA 1987-528950	19870204	<--
US 4838924	A	19890613	US 1987-39457	19870401	<--
CA 1324148	A2	19931109	CA 1992-616404	19920611	<--

PRIORITY APPLN. INFO.:
JP 1985-171025 19850805
JP 1986-64757 19860325
EP 1986-904918 19860804
WO 1986-JP398 19860804
CA 1987-528950 19870204

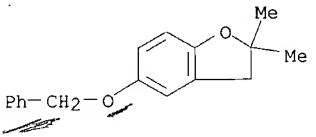
GI



I

AB Urea derivs. I [A = N, CX; X = H, Cl, NO2, CF3; B = H, Me, MeO; Ar = (un)substituted benzofuranyl, benzodioxolanyl, or benzopyranyl], useful as herbicides, were prepd. 2-(3-Methyl-2,3-dihydro-6-benzofuranyloxy)-5-aminopyridine in pyridine was treated with Me2NCOCl in PhMe and the mixt. stirred at room temp. 9 h to give 96% 1,1-dimethyl-3-[2-(3-methyl-2,3-dihydro-6-benzofuranyloxy)-5-pyridinyl]urea (II). At 2 kg/ha, II killed 99-100% cocklebur, blackjack, and jimsonweed, and 60-69% velvet leaf, with <1% damage to wheat, corn, rice, and soybean. Four formulation examples contg. I were given.

IT **111598-51-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and hydrogenation of)
RN 111598-51-7 CA
CN Benzofuran, 2,3-dihydro-2,2-dimethyl-5-(phenylmethoxy)- (9CI) (CA INDEX NAME)



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CA SUBSCRIBER PRICE	-13.25	-13.78

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FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

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L4 STRUCTURE UPLOADED

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L19             1 S L18 AND OHKAWA, S?/AU
L20            24 S L18 AND PD < JULY 1997

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FULL ESTIMATED COST                                     0.30     484.98

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
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CA SUBSCRIBER PRICE                                     0.00     -13.78

STN INTERNATIONAL LOGOFF AT 11:51:44 ON 20 OCT 2000


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US 094451930SP1

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Dossier: 09445193

Legal Date: 02-02-2001

No.	Doccode	Number of pages
1	FOR	151
2	FOR	4
3	NPL	7

Total number of pages: 162

Remarks:

Order of re-scan issued on .....